

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**DRAFT**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:020**

**Permittee Name:** Modine Climate Systems, Inc.  
**Mailing Address:** 551 Tapp Road, Harrodsburg, KY 40330

**Source Name:** Modine Climate Systems, Inc  
**Mailing Address:** same as above

**Source Location:** same as above

**Permit Number:** V-05-045  
**Source A. I. #:** 3153  
**Activity #:** APE20040001  
**Review Type:** Title V  
**Source ID #:** 21-167-00014

**Regional Office:** Frankfort Regional Office  
643 Teton Trail, Suit B  
Frankfort, KY 40601-1758  
(502) 564-3358

**County:** Mercer

**Application  
Complete Date:** June 14, 2005  
**Issuance Date:**  
**Revision Date:**  
**Expiration Date:**

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**John S. Lyons, Director  
Division for Air Quality**

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## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****03 (17) Conveyorized Vapor Degreaser, Baron Blakeslee, Model TH-LLL, Serial #24345****Description:**

Automated batch vapor-cleaning trichloroethylene (TCE) solvent degreasing unit.  
Maximum processing rate: 4.55 gallon per hour solvent.  
Construction Commenced: August 1980.

**APPLICABLE REGULATIONS:**

- a. For the Conveyorized Vapor Degreaser:
  - i. Regulation 401 KAR 63:002, Section 3(p), incorporating by reference 40 CFR 63, Subpart T, applies to hazardous air pollutant emissions from halogenated solvent degreasing operations.

**1. Operating Limitations:**

- a. 40 CFR 63.463:
  - i. Maintain an idling or downtime mode cover that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, or other defects. The cover may be off during maintenance, monitoring, or when the solvent has been removed.
  - ii. The reduced room draft must be maintained at the conditions in which it was determined to not exceed 15.2 meters per minute.
  - iii. The cleaning machine shall have a freeboard ratio of 0.75 or greater.
  - iv. The cleaning machine shall have an automated parts handling system capable of moving parts or parts basket at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of clean parts.
  - v. The vapor-cleaning machines shall be equipped with a device that shuts off sump heat if the sump liquid solvent level drops to the sump heater coils.
  - vi. The vapor-cleaning machines shall be equipped with a vapor level control device that shuts off sump heat if the vapor level rises above the height of the primary condenser.
  - vii. The cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of 40 CFR 63, Subpart T, condition 63.463(e)(2)(vii).
  - viii. The dwell, freeboard refrigeration device, reduced room draft, and carbon adsorption device shall be maintained and operated according to manufacturer's specifications during operation of the cleaning machine.
  - ix. The parts basket or the parts being cleaned in an open-top batch vapor cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.
  - x. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air.

**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- xi. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the Division for Air Quality.
  - xii. Parts baskets or parts shall not be removed from any solvent-cleaning machine until dripping has stopped.
  - xiii. The vapor-cleaning machine shall have a primary condenser. During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater. During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the vapor layer allowed to collapse before the primary condenser is turned off.
  - xiv. The solvent shall be transferred to and from the solvent cleaning machine using threaded or other leak proof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
  - xv. Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturer's of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.
  - xvi. The solvent cleaning machine shall be operated according to manufacture's specifications. All operators must complete and pass the applicable sections of the test of solvent cleaning operating procedures in 40 CFR 63, Subpart T, Appendix B, if requested during an inspection by the Division for Air Quality.
  - xvii. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers.
  - xviii. Sponges, fabric, wood, and paper products shall not be cleaned.
- b. 401 KAR 63:020 Section 3
- i. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet.

**Compliance Demonstration Method:** See Section D

**2. Emission Limitations:**

- a. 40 CFR 63.463(e)(2)(vii)(A):
  - i. The concentration of the solvent in the exhaust of the carbon bed adsorber shall be maintained below 100 parts per million (PPM) of any halogenated HAP. If the concentration exceeds 100 PPM, then the permittee shall adjust the desorption schedule or replace the disposable canister.

**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements:**

- a. 40 CFR 63.465(d) and (e)
  - i. Calculate the dwell time by the following methods.
    1. Determine the amount of time for the part or parts basket to cease dripping once placed in the vapor zone. The part or parts basket used for this determination must be at room temperature before being placed in the vapor zone.
    2. The proper dwell time for parts to remain in the freeboard area above the vapor zone is no less than 35 percent of the time determined above.
  - ii. Determine the potential to emit using the following procedures. A facility's total potential to emit is the sum of the hazardous air pollutant (HAP) emissions from all solvent cleaning operations, plus all HAP emissions from other sources within the facility.
    1. Determine the potential to emit for each individual solvent cleaning using the following equation.

$$PTE_i = H_i \times W_i \times SAI_i$$

Where:

$PTE_i$  = potential to emit for solvent cleaning machine i (kilograms of solvent per year),

$H_i$  = hours of operation for solvent cleaning machine i (hours per year),

$W_i$  = working mode uncontrolled emission rate (kilograms per square meter per hour), and

$SAI_i$  = solvent/air interface area of solvent cleaning machine i (square meters).

40 CFR 63, Subpart T, condition 63.461 defines the solvent/air interface area for those machines that have a solvent/air interface.

2. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the following equation.

$$SAI = 2.20 * (Vol)^{0.6}$$

Where  $SAI$  = solvent/air interface area (square meters), and  $Vol$  = cleaning capacity of the solvent cleaning machine (cubic meters).

3. Sum the  $PTE_i$  for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

- b. Refer to Section D.

**4. Specific Monitoring Requirements:**

- a. 40 CFR 63.466
  - i. The permittee shall perform the following inspections on a monthly basis on the solvent cleaning machines.

**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- A. The dwell time shall be determined by measuring the period of time that parts are held within the freeboard area of the solvent cleaning machine after cleaning.
- B. The temperature of the center of the air blanket for the freeboard refrigeration device shall be measured with a thermometer or thermocouple during idling periods.
- C. The hoist speed shall be determined quarterly by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes and shall not exceed 3.4 meters per minute.
- ii. The permittee shall perform the following inspections on a weekly basis on the solvent cleaning machines.
  - A. The wind speed in the reduced room draft area shall be measured quarterly with a velometer. The room parameters set forth in the initial compliance demonstration shall be monitored on a weekly basis.
  - B. Measure and record the concentration of the halogenated HAP solvent from the exhaust of the carbon bed adsorber weekly with a calorimetric detector tube. The sampling port must be located at least 8 stack diameters downstream from any flow disturbances or other outlet and at least 2 diameters upstream from any flow disturbances. This test shall be conducted while the solvent cleaning machine is in operation and venting to the adsorber. The exhaust concentration shall be determined by the methods described in 40 CFR 63.466(e).
- c. Refer to Section F.

**5. Specific Recordkeeping Requirements:**

- a. 40 CFR 63.467
  - i. The permittee shall maintain the following records for the lifetime of the solvent cleaning machine.
    - 1. Owners manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment.
    - 2. The date of installation for the solvent cleaning machine and all of its control devices.
    - 3. The tests required to determine the appropriate dwell time for each part or parts basket as specified in 40 CFR 63, Subpart T, condition 63.465(d).
    - 4. The halogenated HAP solvent content for each solvent used in the solvent cleaning machine.
  - ii. The permittee shall maintain the following records for a period of five years.
    - 1. The results of all control device monitoring required under 40 CFR 63.466.
    - 2. Information on the actions taken to comply with 40 CFR 63.463(e)(vii).
    - 3. Estimates of the annual solvent consumption for each solvent cleaning machine.
    - 4. The date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon bed adsorber exhaust.

**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

iii. The average wind speed in the reduced room draft area shall be recorded quarterly.

b. Refer to Section F.

**6. Specific Reporting Requirements:**

a. 40 CFR 63.468

i. The permittee shall submit annual reports by February 1 following the reported year and shall include the following.

1. A signed statement from the facility owner or a designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 40 CFR 63, Subpart T, condition 63.463(d)(10)".

2. An estimate of solvent consumption for each solvent cleaning machine.

ii. The permittee shall submit semiannual reports containing information on the actions to comply with the reduced room draft and dwell limitations.

**7. Specific Control Equipment Operating Conditions:**

a. The carbon bed adsorber shall not be bypassed during desorption.

b. The reduced room draft must be maintained such that the flow or movement of air across the freeboard area of the solvent cleaning machine shall not exceed 15.2 meters per minute.

**8. Alternate Operating Scenarios:**

None.



**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****06 (06, 11, 12)****Electrocoat Paint Line (E-Coat)****Description:**

Electrodeposition surface coating unit: includes a drying oven and an ultrafiltration membrane.

Maximum processing rate: 2.47 gallon per hour applicator capacity.

Construction Commenced: Before February 4, 1981.

**APPLICABLE REGULATIONS:**

- a. For the Electrocoat Paint Line:
  - i. Regulation 401 KAR 63:002, Section 3(s), incorporating by reference 40 CFR 63 Subpart Mmmm, applies to hazardous air pollutant emissions from miscellaneous metal parts surface coating operations. The applicable provisions of Subpart Mmmm listed in this permit are subject to a compliance date of January 2, 2007.
  - ii. Regulation 401 KAR 63:020 applies to potentially hazardous matter or toxic substances.

**1. Operating Limitations:**

- a. § 63.3883(b)
  - i. The permittee shall comply with the applicable requirements under 40 CFR 63, Subpart Mmmm listed in this permit on or before January 2, 2007.
- b. § 63.3892(a)
  - i. For any coating operation on which compliant material option or the emission rate without controls option is used, no operating limits apply.
- c. § 63.3893(a)
  - i. For any coating operation on which compliant material option or the emission rate without controls option is used, no work practice standards apply.
- d. § 63.3900(a)(1)
  - i. The coating operation must be in compliance with the emission limit in **2. Emission Limitations**, A. at all times.
- e. Regulation 401 KAR 63:020 Section 3
  - i. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet.

**Compliance Demonstration Method:** See Section D

**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations:**

- a. § 63.3890
  - i. HAP emissions shall not exceed 0.31 kg organic HAP/liter (2.6 lbs/gal) coating solids.

**Compliance Demonstration Methods:**

- I. Use compliant materials. Demonstrate that the organic HAP content of each coating used is less than or equal to the limit in a. and that each thinner and each cleaning material used contains no organic HAP. HAP content shall be calculated following equations listed in §63.3941(b) through (d).
- II. Emission rate without add-on controls; demonstrate that based on the coatings, thinners, and cleaning materials used, the organic HAP emission rate for the paint line is less than or equal to the limit in a. calculated as a rolling 12 month basis and determined on a monthly basis. Organic HAP emissions are to be calculated following equations listed in §63.3951(a) through (g).

**3. Testing Requirements:**

- a. 40 CFR 63.3941, Initial Compliance with Emission Limitations.
- b. Refer to Section D.

**4. Specific Monitoring Requirements:**

See 6. Specific Reporting Requirements below.

**5. Specific Recordkeeping Requirements:**

- a. §63.3930
  - i. A copy of each notification and report submitted to the division as well as the supporting documentation shall be kept.
  - ii. Current copies of information provided by manufacturers and suppliers such as formulation data, or test data used to determine the mass fraction of organic HAP/VOC and density for each coating, thinner, and cleaning material and the volume fraction of coating solids for each coating shall be kept. If testing was conducted by the permittee to determine mass fraction of organic HAP/VOC, density, or volume fraction of coating solids, a copy of the complete test report shall be kept. If testing was done by the manufacturer, a summary sheet of the results is sufficient.
  - iii. If using more than one compliance option, a record of which option was used and the beginning and ending dates of use for the compliance period shall be kept.
  - iv. For the compliant material option, keep records of the calculations of the organic HAP content for each coating.

**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- v. For the emission rate without add-on controls option, keep records of the calculations of the total mass of organic HAP emissions for the coatings, thinners, and/or other additives, and cleaning materials used each month, if applicable, the calculations used to determine mass of organic HAP in waste materials, the calculations of the total volume of coating solids used each month, and the calculation of each 12-month organic HAP emission rate.
  - vi. Record the name and volume of each coating, thinner and/or other additive, and cleaning material used during the compliance period, if using the compliant material option for all coatings at the source, purchase records of each material used may be maintained rather than a record of the volume used.
  - vii. Record the density and mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period unless the material is tracked by weight.
  - viii. Record the volume fraction of coating solids for each coating used during the compliance period.
  - ix. If using the waste material allowance, record must be kept pursuant to §63.3930(h)(1) through (3).
  - x. Records of the date, time, and duration of each deviation from the emission limit must be kept.
  - xi. All records must be maintained for a period of 5 years.
- b. Refer to Section F.

**6. Specific Reporting Requirements:**

- a. Notification of Compliance Status No later than **30 calendar days** following the end of the initial compliance period of 180 days, the permittee shall submit a notification of compliance status to the Division for Air Quality Frankfort Regional Office, with a copy to the Central Office at the addresses in Section F.9.f. of this permit. This notice of compliance shall contain the following:
  - i. Company name and address.
  - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
  - iii. Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period of 180 days.
  - iv. Identification of the compliance option or options specified above in **Emission Limitations** which apply to the source.
  - v. Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.
  - vi. Information about any deviations from permit conditions which may have occurred. This would include a description of and statement of the cause of the deviation. If the deviation is a failure to meet the emission limit all calculations used to determine the kg (lbs) organic HAP emitted per liter (gal) of coating solids used shall be included in the notice.

**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

vii. Calculations of the following shall be included along with examples of how the values were determined, to include supporting data:

1. The mass fraction of organic HAP for one coating, one thinner, and one cleaning material.
2. The volume fraction of coating solids for one coating.
3. The density for one coating, one thinner, and one cleaning material.
4. The amount of waste materials and the mass of organic HAP contained in the waste materials for which you claim an allowance against the amount emitted.
5. Summary showing kg (lb) organic HAP emitted from all coatings, thinners, and cleaning materials per liter (gal) coating solids used. This shall be shown for each month and summarized on a rolling 12 month basis.
6. For the compliant material option, provide the kg (lb) organic HAP per liter (gal) coating solids used calculated using equations listed in §63.3941(b) through (d) for one coating.
7. For the emission rate without add-on controls, provide the total mass of organic HAP emissions for each month; the calculated total volume of each coating used each month; and the calculated 12-month organic HAP emission rate, calculated using Equations 1 and 1A through 1C of §63.3951.

b. Semiannual Compliance Report

- i. The semiannual compliance reporting periods are January 1 – June 30 and July 1 – December 31. The permittee shall submit a semiannual compliance report to be postmarked or delivered no later than 30 days after the end of the applicable six month period. The first report shall cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in A. above and ends on either June 30 or December 31, which ever occurs first.
- ii. The compliance report must contain the following items:
  1. Company name and address;
  2. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
  3. Date of report and beginning and ending dates of the reporting period;
  4. Identification of the compliance option or options used on each coating operation during the reporting period. If more than one option was used during the period, the beginning and ending date for each option shall be stated;
  5. Calculation results for each rolling 12 month organic HAP/VOC emission rate during the 6-month reporting period;
  6. If there were no deviations from the emission limitations in this permit then the report shall include a statement to that there were no deviations from the emission limitations during the reporting period.

**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

7. If using the complaint material option and a deviation was recorded, the semiannual compliance report must contain the following information:
  - A. Each coating used that the deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.
  - B. The calculation of the organic HAP content for each coating used during the period of deviation.
  - C. The determination of mass fraction of organic HAP for each thinner, additive, and cleaning material used during the period of deviation.
  - D. A statement explaining the cause of each deviation
8. If using the without add-on controls option and a deviation was recorded, the semiannual compliance report must contain the following information:
  - A. The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate was exceeded.
  - B. The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred, and if applicable submit the calculation of mass organic HAP in waste material.
  - C. A statement explaining the cause of each deviation.

c. Refer to Section F

7. **Specific Control Equipment Operating Conditions:**

None.

8. **Alternate Operating Scenarios:**

N/A

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****14 (35) Copper Coil Brazing****Description:**

Copper coil heat exchangers brazing  
Maximum processing rate: 1.0 pound per hour braze ring and wire flux.  
Construction Commenced: 08/79.

**24 (40-42) Evaporator Coil Brazing****Description:**

Aluminum heat exchangers brazing  
Maximum processing rate: 0.68 pound per hour aluminum solder rings, 0.08 pound per hour aluminum solder wire, and 29.25 pound per hour flux. Construction Commenced: 6/87

**APPLICABLE REGULATIONS:**

- a. For the Copper Coil Brazing:
  - i. Regulation 401 KAR 59:010 applies to particulate and visible emissions.
  - ii. Regulation 401 KAR 63:020, applies to potentially hazardous matter or toxic substances.
- b. For the Evaporator Coil Brazing:
  - i. Regulation 401 KAR 59:010 applies to particulate and visible emissions.
  - ii. Regulation 401 KAR 63:020, applies to potentially hazardous matter or toxic substances.

**1. Operating Limitations:**

- a. 401 KAR 63:020 Section 3, persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet.

**Compliance Demonstration Method:** See Section D

**2. Emission Limitations:**

- a. 401 KAR 59:010 Section 3(1) Visible emissions shall not equal or exceed 20 percent opacity, as determined by using Reference Method 9, Appendix A, 40 CFR 60.
- b. 401 KAR 59:010 Section 3(2) Hourly particulate emissions for each emission point as measured by Reference Method 5, Appendix A, 40 CFR 60, averaged over three hours shall not exceed the limit calculated by the following formula.

$$E = 3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into any emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight for a particular emission point equals or is less than 0.5 ton/hour, the particulate matter emission limitation shall be 2.34 lbs/hr.

**SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (continued)**

**Compliance Demonstration Method:** To provide reasonable assurance that the particulate matter emission limitations are being met, the permittee shall monitor the amounts and types of process materials added to each emissions unit. The hourly average process weight shall be equal to the total process weight added each day averaged over the hours of operation per day. Particulate emissions shall be calculated as follows:

$$PE = PW \times PEF$$

Where PE = Particulate emissions in lbs/hr, PW = process weight in tons/hr (averaged over one month) and PEF = EIS particulate emission factor in lbs/ton of process weight.

3. **Testing Requirements:**

Refer to Section D.

4. **Specific Monitoring Requirements:**

Visible emission limitations:

- i) Perform a qualitative visual observation of the opacity of emissions from each stack/vent on a monthly basis and maintain a log of the observation. The log shall note:
  - 1) whether any air emissions (except for water vapor) were visible from the vent/stack,
  - 2) all emission points from which visible emissions occurred.
- ii) Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent are observed.
- iii) Total monthly process rate for each affected unit and the monthly hours of operation shall be monitored and recorded.

5. **Specific Recordkeeping Requirements:**

The permittee shall maintain records of the visual observations, Reference Method 9 tests, and the amount of process weight added to each emissions unit.

6. **Specific Reporting Requirements:**

Any exceedance over the opacity or particulate emission limits as stated in this permit shall be reported to the Division as specified in Section F.8. The company shall certify to the Division, annually, whether a monthly visible emission survey was conducted for this emission point, and whether the emission point was in compliance with the applicable opacity requirements.

7. **Specific Control Equipment Operating Conditions:**

None.

8. **Alternate Operating Scenarios:**

None.

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	<u>Generally Applicable Regulation</u>
1.	3 Cleaning Tanks (24, 25, 25A)	401 KAR 59:010
2.	3 Solder Repair Stations (21, 22, 43)	401 KAR 59:010
3.	Braze Washer EP# 24 (41)	401 KAR 59:010
4.	Dry-off Oven EP# 24(42) Rated at 1.0 mmBTU/hr	401 KAR 59:015
5.	MIG Welding EP# 22 (26)	401 KAR 59:010
6.	3 Ultrasonic Soldering Machines (44, 45, 56)	401 KAR 59:010
7.	Maintenance Repair (46)	401 KAR 59:010
8.	Hand Brazing (47-55)	401 KAR 59:010
9.	Charge/Test Booths EP# 32(20, 28-31)	401 KAR 59:010
10.	5 Air Makeup Units < 1mmBTU/hr	NA
11.	2 Air Makeup Units 2.16 mmBTU/hr	401 KAR 59:015
12.	29 Space Heaters < 1 mmBTU/hr	NA
13.	Natural Gas Fired Boiler EP# 29 (21A) Rated at 7.3 mmBTU/hr	401 KAR 61:015
14.	Natural Gas Fired Boiler EP# 28 (21B) Rated at 8.4 mmBTU/hr	401 KAR 59:015
15.	3 Air Make-up Units EP# 57(57), 58(58), 59(59) Rated at 1.53, 4.0, and 5.0 mmBTU/hr	NA
16.	2 Bake Ovens EP# 03(6, 7, 8, 11, 12) Rated at 1.8 and 1.6 mmBTU/hr	401 KAR 59:015



**SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)**

- |     |   |                |
|-----|---|----------------|
| 17. | 1 Dry-off Oven EP#60 < 1 mmBTU/hr   | 401 KAR 59:015 |
| 18. | Copper Coil Brazing Natural Gas Usage EP# 14(35)<br>Rated at 1.0 mmBTU/hr | NA             |

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. PM emissions and Opacity, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. In order to show compliance with 401 KAR 63:020, Potentially hazardous matter or toxic substances, the permittee shall model for gaseous trichloroethylene, due to the emission of trichloroethylene from the source. The concentration of trichloroethylene in the ambient air, open to the public, shall be below the carcinogenic risk of 1 in 1 million (as listed in the EPA Prioritized Dose-Response Values (PRDV)), which corresponds to a concentration of trichloroethylene less than or equal to  $0.5 \mu\text{g}/\text{m}^3$ . Results shall be sent to the Division for Air Quality, no later than 3 months from issuance of this permit.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
2. Pursuant to 401 KAR 63.002 Section 3(n) incorporated by reference 40 CFR 63 Subpart T:
  - a. §63.463(e)(2)(vii)(B)  
The carbon bed adsorber shall not be bypassed during desorption.
  - b. §63.463(e)(2)(ii)(B)  
The reduced room draft must be maintained such that the flow or movement of air across the freeboard area of the solvent cleaning machine shall not exceed 15.2 meters per minute.

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

**SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality  
Frankfort Regional Office  
**643 Teton Trail, Suit B**  
**Frankfort, KY 40601-1758**

U.S. EPA Region 4  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta, GA 30303-8960

Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

**SECTION G - GENERAL PROVISIONS****(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

**SECTION G - GENERAL PROVISIONS (CONTINUED)**

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.



**SECTION G - GENERAL PROVISIONS (CONTINUED)**

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
  - a. Applicable requirements that are included and specifically identified in the permit and
  - b. Non-applicable requirements expressly identified in this permit.
17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

## SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

Not Applicable

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
  - e. This requirement does not relieve the source of other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

## SECTION G - GENERAL PROVISIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 1515  
Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

**SECTION H - ALTERNATE OPERATING SCENARIOS**

Not Applicable

**SECTION I - COMPLIANCE SCHEDULE**

Not Applicable